

## A FIXED POINT THEOREM IN FUZZY METRIC SPACE WITH SEMICOMPATIBLE AND RECIPROCALLY CONTINUOUS MAP

## ANKITA TIWARI<sup>1</sup>, VANDANA GUPTA<sup>2</sup>, SANDEEP K.TIWARI<sup>3</sup> & ARIHANT JAIN<sup>4</sup>

<sup>1</sup>School of Studies in Mathematics, Vikram University, Ujjain, Madhya Pradesh, India
<sup>2</sup>Professor & Head, Department of Mathematics, Government Kalidas Girls College, Ujjain, Madhya Pradesh, India
<sup>3</sup>Reader, School of Studies in Mathematics, Vikram University, Ujjain, Madhya Pradesh, India
<sup>4</sup>Department of Applied Mathematics, Shri Guru Sandipani Institute of Technology and Science, Ujjain, Madhya Pradesh, India

## ABSTRACT

The aim of the present paper is to establish a common fixed point theorem for semi compatible pair of self maps in a Fuzzy metric space which generalizes and improves various well known comparable results.

**KEYWORDS:** Common Fixed Point, Fuzzy Metric Space, Reciprocal Continuity, Semi Compatible, Weakly Compatible